

CLAIMS

1. Plastic container (10, 20), especially one made of styrene and/or polyolefins, for the packaging and long-term storage of food products and the like, such as salads, fruit extracts, beverages in disposable portion packs for beverage vending machines, toothpaste, etc., wherein, to reduce the amount of oxygen penetrating the closed plastic container (10, 20), the plastic container is provided with a coating that hinders the diffusion of oxygen, characterized by the fact that the exterior and/or interior surface (15, 25) of the container is coated with a coating (30) with oxygen barrier properties, and the coating (30) is largely adapted to the container material and possibly to the container contents with respect to its properties, for example, its mechanical strength, thermal expansion, and chemical resistance to the contents of the container, such that the coating materials used for the coating are based on modern epoxy resins or amine adducts.

2. Plastic container (10, 20) in accordance with Claim 1, characterized by the fact that the coating (30) is applied by spray coating and/or dip coating only the outer surface or the entire freely accessible surface of the plastic container (10, 20) in one operation.

3. Plastic container (10, 20) in accordance with Claim 1 or Claim 2, characterized by the fact that the coating (30) is composed of at least two individual layers that are applied one over the other and preferably consist of different materials.

4. Plastic container (10, 20) in accordance with Claim 3, characterized by the fact that one of the individual layers is a layer produced by metallization.

5. Plastic container (10, 20) in accordance with Claim 1, Claim 2, Claim 3, or Claim 4, characterized by the fact that, after it has been applied to the container surface (15, 25), the coating (30) is subjected to an aftertreatment that consists, for example, of heating or UV irradiation, e.g., for the purpose of drying it or curing it.

6. Plastic container (10, 20) in accordance with one or more of Claims 1 to 5, characterized by the fact that the thickness of the finished coating (30) varies from about 0.003 μm to 0.03 μm , and preferably from 0.007 μm to 0.01 μm .

7. Plastic container (10, 20) in accordance with one or more of Claims 1 to 6, characterized by the fact that the container surface (15, 25) to be coated is pretreated, e.g., by flame treating, before it is coated and is then, for example, fat-free and/or dust-free and/or roughened.